PUBLIC WORKS & SERVICES

1. OVERVIEW

MISSION

The Department of Public Works and Services mission is to deliver quality services to satisfy the needs of its clients, while achieving the best value for government, communities, business and residents.

GOALS

1. Suitable facilities are available to support delivery of government programs.
2. Protection of life and property is achieved through the enforcement of the provisions of electrical, gas, boiler and pressure vessel legislation.
3. Suitable information technology infrastructure and services are available to support the delivery of government programs and services.
4. Basic community needs for heating, transportation and power generation fuels are met through the safe and reliable provision of fuel services.
5. Effective management of government records.

PROPOSED BUDGET ($000)

Total Operating Expenses	$92,959
Compensation & Benefits	$24,362
Grants & Contributions	-
Other O&M	$63,525
Amortization	$5,072
Infrastructure Investment	$14,302

SCOPE OF OPERATIONS ($000)

Public Works and Services (PWS) has a proposed appropriated budget of $92,959 for 2011/12, although that budget amount does not accurately represent the full scope of work that PWS is responsible for providing. PWS provides services through revolving funds, chargeback accounts, agreements with other government departments, boards and agencies, and is responsible to deliver capital programs on behalf of other departments. The following provides a picture of the actual magnitude of the operations undertaken in PWS based on 2010/11 funding:

Activity	**Funding ($000's)**
Operations and Maintenance Base	$92,764
PWS Capital Acquisition Plan (Includes carryover)	$40,540
TSC Chargeback	$17,319
Petroleum Products Revolving Fund	$29,123
Public Stores Revolving Fund	$326
Vote 4/5: Work performed on behalf of others	$234

Projects Using Client Funding	$149,000
Total Scope for 2011/12	**$329,306**

PROPOSED POSITIONS

Headquarters (HQ)	113 positions
Regional/Other Communities	159 positions

KEY ACTIVITIES

- Corporate Management
- Asset Management
- Technology Service Centre
- Petroleum Products

STRATEGIC ACTIONS

Maximizing Opportunities

- Improve Skills for Living and Working
    - New Apprentices in Designated Trades and Occupations

Refocusing Government

- Change the GNWT's Approach to Infrastructure
    - O&M to Focus on Deferred Maintenance
    - Risk Management and Safety Program
    - New Capital Planning Process
    - Corporate Capital Planner
    - New Indeterminate Trades
    - Consolidation of Utilities
    - O&M of GNWT Buildings
    - Settlement Maintainers

- Manage the Cost of Government
    - Financial Shared Services & Procurement

Managing This Land

- Protect Territorial Water
    - Water Supply System Upgrades, Training and Support

- Mitigate and Adapt to Climate Change Impacts
    - Reducing GNWT Energy Use
        Wood Pellet Boiler – Fort Simpson
        Capital Asset Retrofit Fund

2. EMERGING ISSUES

Financial and Procurement Shared Services

The appeal of shared services is widely recognized, and many governments have moved, or are moving, parts of their business toward a shared services model. Areas such as human resources, finance and accounting are the more common models implemented in organizations looking to centralize their key support functions. Procurement shared service models are being implemented to lesser degree and while the challenges faced are significant, organization successful in their implementation have found that shared services and procurement are extremely compatible.

Devolution

The devolution process also has the potential to present challenges for Public Works and Services. As responsibilities and the associated positions are transferred from the federal government to the territorial government, PWS will be required to lease or build additional office accommodations to house the additional employees, and there will also be impacts on the TSC, records storage and other areas of PWS. This will present a significant challenge as suitable office space is currently at a premium in the NWT.

Cost of Fuel

In response to the challenge of fluctuating oil prices, the Petroleum Products Division (PPD) is exploring strategic partnerships and supply and transportation alternatives in order to stabilize the cost of fuel products for people in communities served by the program. While cost is a very important factor, efforts to reduce costs must not increase risk, reduce fuel product quality or erode the delivery of services to communities.

Climate Change

Climate change is a global issue and expected to affect all of Northern Canada, the Western Arctic, and particularly the Mackenzie Delta. Warming air and soil temperatures and increased precipitation will affect the performance of existing infrastructure. Design and maintenance of future infrastructure must take into account the conditions which may be expected during the life of the facility.

Adequate Network Bandwidth

Increasing demands for network bandwidth for Education, Health and other GNWT programs will continue to be a challenge particularly in smaller communities where existing infrastructure is at, or near, capacity.

In the remote satellite-served communities, satellite latency provides further challenges for the provision of high speed, high bandwidth departmental initiatives.

3. 2011-12 PLANNING INFORMATION

The detailed description of planned activities for the department includes the following sections:

a) **Fiscal Position and Budget** provides information on the department's operation expenses and revenues.

b) **Key Activities** describes the department's major programs and services, including strategic activities, as well as results to date and measures.

c) **Infrastructure Investments** gives an overview of the department's infrastructure investments to date and activities planned for 2011-12.

d) **Legislative Initiatives** provides a summary of the department's legislative initiatives during the 16th Legislative Assembly as well as initiatives planned for 2011-12.

e) **Human Resources** includes overall statistics and position reconciliation, information on capacity building activities as well as departmental training and development.

f) **Information Systems and Management** describes department-specific information and management systems as well as major initiatives planned for 2011-12.

a) Fiscal Position and Budget

DEPARTMENTAL SUMMARY

	Proposed Main Estimates 2011-12	Main Estimates 2010-11	Revised Estimates 2009-10	Actuals 2008-09
	(000's)	(000's)	(000's)	(000's)
OPERATIONS EXPENSE				
Directorate	7,542	7,323	6,673	6,508
Asset Management	81,922	81,946	47,378	48,914
Technology Service Centre	1,361	1,361	1,267	813
Petroleum Products	2,134	2,134	1,779	1,260
TOTAL OPERATIONS EXPENSE	**92,959**	**92,764**	**57,097**	**57,495**
REVENUES	**1,879**	**1,884**	**1,884**	**1,744**

OPERATION EXPENSE SUMMARY

		Proposed Adjustments				
	Main Estimates 2010-11	Forced Growth	Strategic Initiatives	Sunsets and Other Adjustments	Internal Reallocations	Proposed Budget 2011-12
	($000)	($000)	($000)	($000)	($000)	($000)
Directorate						
Department Management	566	23	0	0	0	589
Finance	991	18	0	0	0	1,009
Policy and Planning	508	19	0	0	0	527
Information Services	1,731	41	0	0	0	1,772
Regional Program Delivery	3,527	118	0	0	0	3,645
Amortization	0	0	0	0	0	0
Total Directorate	**7,323**	**219**	**0**	**0**	**0**	**7,542**
Asset Management						
Division Management	964	13	0	0	0	977
Infrastructure Management	536	9	0	0	0	545
Contract and Procurement Services	752	31	300	(125)	0	958
Facility Planning	567	46	0		0	613
Technical Support	1,781	53	0	0	0	1,834
Inspection Services	1,282	51	0	0	0	1,333
Property Management	1,443	8	0	0	0	1,451
Leases	18,583	960	0	0	0	19,543
Building and Works	22,371	925	0	(3,791)	0	19,505
Vehicles and Equipment	384	0	0	0	0	384
Utilities	25,637	1410	0	0	0	27,047
Regional Projects	2,823	215	0	(139)	0	2,899
Facility Risk Management & Safety	3,246	10	0	0	0	3,256
Amortization	1,577	0	0	0	0	1,577
Total Asset Management	**81,946**	**3,731**	**300**	**(4,055)**	**0**	**81,922**
Technology Service Centre						
Amortization	1,361	0	0	0	0	1,361
Total Technology Service Centre	**1,361**	**0**	**0**	**0**	**0**	**1,361**
Petroleum Products						
Amortization	2,134	0	0	0	0	2,134
Total Petroleum Products	**2,134**	**0**	**0**	**0**	**0**	**2,134**
Total Department	**92,764**	**3,950**	**300**	**(4,055)**	**0**	**92,959**

REVENUE SUMMARY

	Proposed Main Estimates 2011-12	Main Estimates 2010-11	Revised Estimates 2009-10	Actuals 2008-09
	($000)	($000)	($000)	($000)
TRANSFER PAYMENTS				
Labour Canada Agreement	42	42	42	31
GENERAL REVENUES				
Electrical Permits Fees	475	475	475	514
Boiler Registration Fees	370	370	370	347
Gas Permit Fees	65	65	65	52
Elevator Permit Fees	75	75	75	78
Tender Document Fees	5	10	10	5
Administration Fees	-	-	-	15
	990	**995**	**995**	**1,011**
OTHER RECOVERIES				
Water/Sewer Maintenance Services	380	380	374	329
Rental to Others	234	234	200	235
Parking Stall Rentals	13	13	13	11
Sale of Heat Supply	50	50	50	50
Sale of Surplus Assets	100	100	100	77
Amortization recoveries	70	70	70	0
	847	**847**	**807**	**702**
GRANTS IN KIND	-	-	-	
CAPITAL	-	-	-	
REVENUES	**1,879**	**1,884**	**1,844**	**1,744**

Public Works & Services

2011 - 2012 Business Plan

Technology Service Centre (Chargeback)

The Technology Service Centre is responsible for providing centralized computer services to departments. The services include centralized computer processing, service desk, and desktop and network support. The division manages the GNWT's corporate electronic mail system and Internet web site. The Technology Service Centre also maintains and supports a Wide Area Network that provides connectivity to GNWT offices, schools and health centres in all communities, enabling access to remote servers and centralized systems within the government and to the Internet.

	(Thousands of dollars)			
	Proposed Main Estimates 2011-12	Revised Main Estimates 2010-11	Main Estimates 2010-11	Actuals 2009/2010
Income				
Executive	311	298	306	274
Human Resources	988	948	899	819
Legislative Assembly	324	311	330	280
Finance	794	758	746	629
Municipal & Community Affairs	751	719	758	677
Transportation	1,223	1,172	1,192	1,023
Public Works & Services	984	944	942	804
Health & Social Services	3,665	3,516	3,505	3,019
Industry, Tourism & Investment	941	898	947	651
Environment & Natural Resources	2,066	1,985	1,863	1,846
Education, Culture & Employment	4,034	3,880	3,849	2,542
Justice	1,517	1,452	1,520	1,329
NWT Housing Corporation	280	272	297	216
Aboriginal Affairs & Intergovernmental Relations	174	166	165	149
	18,052	**17,319**	**17,319**	**14,258**
Expenditures				
Salaries	6,661	6,319	6,319	5,631
Other Operations	11,391	11,000	11,000	8,627
	18,052	**17,319**	**17,319**	**14,258**
Surplus	-	-	-	-

Notes:

1. An emerging trend indicates that as TSC Clients continue to implement new network delivered solutions to meet changing program requirements, there will be a corresponding demand for increased network services.
2. Any deficit is funded through the Department of Public Works and Services appropriations, and surplus funds are lapsed.

Public Works & Services

2011 - 2012 Business Plan

Petroleum Products Revolving Fund

The Petroleum Products Revolving Fund was established January 19, 1973. The fund provides working capital to finance inventory, accounts receivable and operating expenses, such as salaries, commissions, taxes and quality control, required for the distribution of petroleum products. Operating expenses are recovered through the price structure to achieve a break-even operation.

	(thousands of dollars)			
	Projected Main Estimates 2011-12	Revised Main Estimates 2010-11	Main Estimates 2010-11	Actuals 2009-2010
Authorized Limit	55,000	55,000	55,000	55,000
Income				
Sales Income After Taxes	27,293	26,447	29,026	26,939
Other Revenue	20	20	20	-
	27,313	**26,467**	**29,046**	**26,939**
Expenditures				
Salaries	2,019	1,923	1,825	1,749
Other Operations and Maintenance	1,422	1,422	1,426	1,913
Commissions	2,320	2,092	2,154	2,016
Cost of Goods Sold	21,717	21,084	23,718	21,249
	27,478	**26,521**	**29,123**	**26,927**
Surplus (Deficit)	**(164)**	**(54)**	**(77)**	**12**
Petroleum Products Stabilization Fund				
Opening Balance	636	636	385	624
Surplus / (Deficit)	(164)	(54)	(77)	12
Closing Balance	**472**	**582**	**308**	**636**

b) Key Activities

KEY ACTIVITY 1: CORPORATE MANAGEMENT

Description

The Directorate includes the Deputy Minister's office and Corporate Services Division at Headquarters. In the regions, the Directorate includes the Superintendent and the Finance and Administrative services. The Directorate is responsible for the overall management of the department, managing human and financial resources and providing overall direction and planning. Activities in the Directorate include financial administration, policy and planning, information systems and records management, and regional program delivery.

Records Management is responsible for the delivery of services to GNWT departments, boards, and agencies. Responsibilities include developing government-wide policies, standards and guidelines, support and training, records storage and retrievals and maintaining systems such as the Administrative Records Classification System (ARCS) and the Integrated Recorded Information Management System (iRIMS). It also coordinates the operation of four GNWT records centres, located in Yellowknife, Inuvik, Fort Smith and Fort Simpson.

The Directorate co-ordinates activities in support of GNWT priorities and departmental goals, and maintains effective communication within the department, and with other departments, governments including aboriginal self-governments, the private sector, and other interest groups.

Major Program and Services 2011-12

Overall

Electronic Records Document Management System (ERDMS)

The ERDMS Project is a GNWT-wide initiative. This project is being managed by the OCIO. PWS has been chosen as the department to pilot the ERDMS solution once it has been chosen.

The solution will be initiated in the department during the 2010/11 fiscal year. The implementation process will continue into 2011/12.

Multi-Media Vital Records Storage Facility

Vital records are those records that are critical to sustaining an organization's business during or after a period of crisis. Typically, one to five percent of an organization's records can be considered vital. In the GNWT, many of these records document current and future contractual obligations, and should be protected to safeguard both the GNWT's interests and its obligations to the public. Secure facilities are needed to protect vital records or preserve backup copies of vital records. The majority of documents currently in storage are paper.

Construction of the facility was completed in 2009. Business rules, best practices, and how to guides are under development and will be completed in 2010/11. The facility is now operational.

During 2011/12, business rules, best practices, and how to guides will be refined based on knowledge and experience gained through the first few digitization projects.

Strategic Initiatives

MAXIMIZING OPPORTUNITIES

Action: Improve Skills for Living and Working

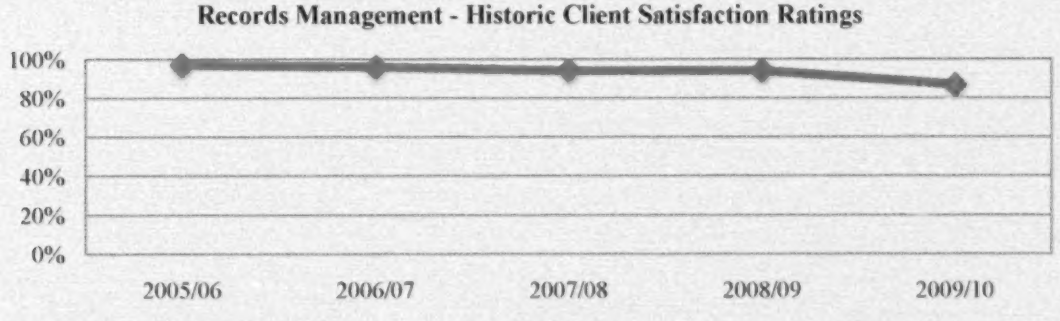
New Apprentices in Designated Trades and Occupations
Departments and NWT community governments have always experienced difficulty staffing trades positions, especially in the smaller communities. The shortage of skilled tradespersons has contributed to rising costs and delays in the delivery of projects and maintenance services. Over the past four years the apprenticeship program has proven to be an effective method of helping to develop a stronger and more skilled northern workforce and is serving to mitigate the cost impact experienced with the continuing shortage of tradespersons

There are eleven apprentice positions. Nine positions are filled with the incumbents being in various stages of completing their requirements (academic and working hours) towards apprenticeship certification.

In 2011/12, PWS will continue to deliver the apprenticeship program. As apprentices finish their programs, PWS will recruit to fill vacant positions.

Measures Reporting

Overall Client Satisfaction
Target: 80% satisfaction



PWS carried out client satisfaction surveys in February and March for the current fiscal year. The overall client satisfaction rating for 2009/10 was 87%.

Records Management Training requests are satisfied
Target: 100% of total

- In 2009/10, 100% of training requests were met.
- 595 GNWT employees have been trained since the 2007/08 fiscal year.

Response to routine records retrievals

Target: 100% are completed within 24 hours

- In 2009/10, 100% of routine records retrievals have been completed within 24 hours.
- 9,300 routine records retrievals have been completed since the 2007/08 fiscal year.

Response to urgent records retrievals requests

Target: 100% are completed within 2 hours

- In 2009/10, 100% of urgent records retrievals have been completed within 2 hours.

KEY ACTIVITY 2: ASSET MANAGEMENT

Description

The Asset Management Division is responsible, on behalf of government departments, for the planning, design, construction, operation and maintenance of buildings and works throughout the NWT. Regional offices manage the delivery of maintenance and project management services, ensuring that client needs are met and facility life cycle costs are minimized. Headquarters supports the regions by providing facility planning , technical expertise for program and design standards, facility evaluations, troubleshooting, facility commissioning, granular materials planning and coordination, procurement and project management support, and technical support for safe drinking water initiatives.

PWS assumes responsibility for energy management within the government facilities it maintains. For existing buildings, this includes energy consumption analysis and benchmarking, detailed energy audits, infrared thermal scanning, and the inspection of electrical and mechanical systems. For new buildings, the EcoEnergy Validation Program Protocol is used, which includes computer modeling of energy use. As part of the modeling, an energy workshop with designers, clients, and operators allows various equipment options to be discussed and simultaneously modeled for energy consumption and savings.

Asset Management also coordinates the GNWT's Capital Planning process as well as the planning, acquisition and management of general office space for the GNWT, including leases, and the disposal of the GNWT's surplus real property assets.

Electrical/Mechanical Safety Inspection Services is responsible for the administration and regulation of electrical, elevator, boiler, pressure vessel and gas safety. These tasks protect the public by ensuring that all installations are constructed, all equipment is approved, and all workers are certified in accordance with the various codes and NWT Acts.

Major Program and Service Initiatives 2011-12

Overall

Energy Management Initiatives
PWS will continue to undertake numerous energy efficiency activities in planning, designing, building, maintaining, and operating government-funded buildings and facilities.

Based on detailed energy audits, facility condition assessments, technical status evaluations, energy monitoring, on-site inspections, and thermo graphic scanning, a comprehensive list of energy retrofit items (workplan) has been developed to implement over the next two fiscal years.

All activities identified in the Energy Management Initiatives Section for 2011-12 and future years will be carried out under the Capital Asset Retrofit Program.

Activities planned for 2011-12 and future years include:

- Develop a workplan outlining the proposed energy retrofits/upgrades under the Capital Asset Retrofit Fund program. The workplan will cover three stages: infrared scanning of GNWT and Municipal Buildings, performance of detailed energy audits on those buildings best suited for

energy savings, and selection and implementation of recommended retrofit items. This report will be used to establish a work plan for 2011/12.

- Install a biomass heating system (wood pellet boiler) at the Central Heating plant in Fort Simpson.
- Complete preliminary energy assessments on about 35 GNWT and community buildings in Fort Simpson and surrounding areas to identify poor building envelopes
- Complete detailed energy audits on 4 buildings best suited for energy-saving retrofits and greenhouse gas emission reductions. Incorporate the energy audit results into the capital plan for 2012/13 Capital Asset Retrofit Fund Program.
- Monitor the performance of biomass projects completed in Hay River (Harry Camsell, Princess Alexandra, Ecole Boreale and Diamond Jenness Schools and the Highways Maintenance Garage), Fort Smith (Thebacha College Complex, PWK School/Recreation Centre Complex and the Health Centre), and Legislative Assembly Building in Yellowknife.
- Complete electricity and heating fuel consumption for all GNWT office buildings throughout the NWT and pre-screen to select inefficient buildings for energy audits.
- Investigate and implement biomass heating (wood pellet), residual waste heat recovery and solar including other miscellaneous energy retrofit projects.
- Commissioning of new construction projects to ensure a code-compliant, healthy, and comfortable environment for occupants and a building that operates at peak efficiency to reduce energy consumption, operating costs, and greenhouse gas emissions.
- Designing of buildings to meet the requirements of the Eco-Energy Validation Program and the *Good Building Practice for Northern Facilities to* reduce greenhouse gas emissions and fuel and electricity savings over the building life.
- Participate in national energy-related code development committees to ensure inclusion of energy-efficiency standards into the next cycle of national building codes.
- Participate in community public information sessions on energy conservation and awareness.

Environmental Remediation for Assets at the End of their Useful Life

Aging infrastructure requires additional capital investment to keep them operational. The GNWT currently has 58 assets that have reached or will reach the end of their useful life within the next five (5) years.

As these buildings are replaced through the infrastructure acquisition plan, demolished or surplused an Environmental Site Assessment (ESA) will be completed on each building and its site in order to determine the level of environmental risk to the GNWT and to establish a cost for the environmental clean-up. PWS will then determine the priority of demolition in order to address the greatest risk and savings to the GNWT.

In 2010/11, the demolition and environmental clean-up of the old Chief Albert Wright School in Tulita and the Deh Cho Hall Building in Fort Simpson will be completed

The 2011/12 workplan will identify buildings that require demolition and remediation. The old Fort Good Hope School and the Inuvik Schools are examples of buildings scheduled for demolition.

Strategic Initiatives

REFOCUSING GOVERNMENT

Action: Change the GNWT's Approach to Infrastructure

O&M to Focus on Deferred Maintenance

The Deferred Maintenance initiative provides increased levels of funding for maintenance of aging territorial infrastructure. This funding will address the backlog of maintenance issues identified through building condition assessments completed as part of the Risk Management Program.

The GNWT will see many benefits through the ongoing implementation of this program, including safer buildings, a reduction in the number of unplanned building closures, a reduction in the use of substandard facilities, a reduction in unplanned expenditures and the deferral of major capital expenditures.

The deferred maintenance will continue to identify and correct life safety deficiencies in GNWT assets. Facility Condition Reports will be completed to established the highest priority projects.

As in previous years, the 2011/12 workplan will be established based on the results of the facility condition reports. Examples of planned work include sprinkler upgrades and fire alarm upgrades, replacement of windows, siding, insulation, site stabilization and roof replacements.

Risk Management and Safety Program

Building on Public Works and Services' Risk Management and Safety Program, there is a confirmed requirement for increased levels of maintenance on territorial infrastructure. This deferred maintenance initiative has led to regular facilities condition assessments, and has quantified critical maintenance deficiencies in the GNWT infrastructure.

The deferred maintenance initiative provides increased levels of funding for maintenance of aging territorial infrastructure. This funding will address the backlog of maintenance issues identified through building condition assessments completed as part of the Risk Management Program. The benefits of this increased maintenance include:

- Safer, code updated buildings
- Reduction in unplanned building closures
- Continued availability of building space for program delivery
- Improved building energy efficiency
- Longer building lifespan

To date, 630 facilities have been inspected and have been entered into a building condition database.

Between 2008/09 and 2011/12, a total of $34.7 million of incremental capital and O&M funding has been targeted for deferred maintenance.

	2008/09	2009/10	2010/11	2011/12
Capital Funding	5,000	5,000	5,000	5,000
O&M	5,150	3,550	3,000	3,000

During 2011/12, PWS will continue to focus on deferred maintenance in territorial infrastructure to identify the overall health of the GNWT's inventory for use in assessing the adequacy of capital rehabilitation and replacement funding.

New Capital Planning Process
The GNWT made a series of recommendations to the Corporate Capital Planning process that established procedures for the selection and advancement of projects with the greatest public benefit. The changes were made to increase efficiency when planning, designing, contracting, and building public infrastructure. An evaluation of the Corporate Capital Planning process will be undertaken in 2010/11. This will help set an agenda for activities in 2011/12 that will include:

- Manage the GNWT corporate capital planning process and oversee the Interdepartmental Working Group (IWG), and provide overall direction in the development of the GNWT's five-year capital plan for consideration by the Financial Management Board (FMB).

- Coordinating GNWT departments in the review of their 20 year Capital Needs Assessment (CNA) and the priorities identified in the first 5 years. The position reviews the CNA and verifies the highest priority projects have been identified.

- Reviewing Project Substantiations to ensure adherence with objectives and requirements and collaborating with departments and specialized technical experts to address design and construction issues to ensure that the proposed projects incorporate good building practices.

Corporate Capital Planner
PWS established a Corporate Capital Planner position to fulfill a government-wide role in supporting the changes made in the capital planning and acquisition process of GNWT infrastructure.

The Corporate Capital Planner is managing the GNWT corporate capital planning process and overseeing the Interdepartmental Working Group, providing overall direction in the development of the GNWT's five-year capital plan for consideration by the FMB.

New Indeterminate Trades
Indeterminate Trades positions were established during 2010/11. These positions will support the additional activities associated with the consolidation of maintenance in PWS for GNWT owned infrastructure.

In 2011/12, PWS will continue to provide ongoing support and training for the trades positions.

Consolidation of Utilities
On the recommendation of Refocusing Government, PWS, in consultation with the Office of the Comptroller General and departments, completed an analysis of utilities and expenditure tracking of all Government assets and any leased space where utilities are excluded from base O&M rents. The analysis included a review of base funding and expenditure levels and administrative resources associated with the payment and tracking of utilities.

As result of the analysis, FMB approved the transfer of responsibility and utility funding for consolidation to PWS starting in 2010-11.

Public Works & Services

In 2011/12, PWS will be:

- Tracking utility budgets, expenditures and consumption data in the GNWT's Financial Information System.
- Assessing utility savings achieved through energy management initiatives completed on GNWT building infrastructure.
- Identifying realized utility savings created through its energy conservation initiatives to establish funding that will be used to offset the cost of delivering future energy conservation projects.

O&M of GNWT Buildings
PWS in consultation with DOJ, DOT, ENR, ITI, EC&E and H&SS completed the transfer of buildings and works responsibility and funding for consolidation in PWS. Each department completed a review of existing expenditures, budgets and human resources and identified the appropriate funding and resource requirements for transfer during development of the 2010/11 main estimates.

As result of the analysis, FMB approved the transfer of responsibility and facility maintenance funding for consolidation in PWS starting in 2010-11.

In 2011/12, PWS will be:

- Monitoring and tracking all mandated preventative maintenance activities and expenditures using the department's Maintenance Management System (MMS)
- Ensuring all facilities are maintained to standard and in accordance with NWT acts, codes and regulations.
- Establishing electronic utility billing with NTPC, Northland Utilities and Petroleum Products Division.
- Working with departments to identify any remaining buildings for transfer.

Settlement Maintainers
PWS established three new settlement maintainer positions in Sachs Harbour, Tulita and Ulukhaktok. Three additional positions have been identified for Behchoko, Fort Resolution and Wrigley. This was done as a means to enhance maintenance services in these locations and have more control over the cost and quality of the services provided.

These positions will support the additional activities associated with the consolidation of maintenance in PWS for GNWT owned infrastructure, and allow the department to be more pro-active in completing its mandate of building maintenance, and complying with code mandated checks and repairs and completing deferred maintenance requirements.

The department will provide ongoing support and training for its Settlement Maintainers in 2011/12.

Action: Manage the Cost of Government

Financial and Procurement Shared Services

The Financial and Procurement Shared Services initiative includes completing the planning, design and transition activities required to implement a Financial Shared Services Centre (FSSC), including a shared services procurement model (SSPM), for implementation in 2011-12.

The intent of this activity is to provide for a consistent level of service across government that is compliant with GNWT policies through the consolidation of the financial processing and procurement process activities.

Implementation plans for a financial shared services and procurement shared services models were developed in 2010-11. These plans include governance structure, service level agreements, service delivery model, resource implications and an implementation schedule.

A Purchasing Consultant will plan, design, and transition activities required to implement a Shared Services Procurement Model (SSPM) for the GNWT. Other activities include:

- Approval of FSSC/SSPM governance structure
- Finalize definition of the scope of the SSPM
- Review best practices from other jurisdictions
- Develop service model for the SSPM
- Develop organization and staffing requirements
- Decision and approval of the location of the SSPM
- Develop job descriptions and training plans
- Develop performance measures and evaluation criteria
- Develop Service Level Agreements

In 2011/12, PWS will be:

- *Implementing the Shared Services Procurement Model*
- *Identifying staff to assigned the SSPM functions*
- *Implementing training plans for new staff*

MANAGING THIS LAND

Action: Protect Territorial Water

Water Supply System Upgrades, Training and Support

As part of the implementation of the NWT Drinking Water Strategy, PWS has been carrying out two pilot programs in the NWT. The first pilot program was initiated in 2008/09 to study the viability of using a remote monitoring device to monitor water quality parameters in water supply systems. These remote systems monitor two health based parameters, turbidity and chlorine as per Health & Social Services requirements. Full scale implementation of remote water quality monitoring in water treatment plants will continue until 2011/2012.

Nine communities have been selected for consideration for full implementation of remote monitoring. The communities are: Fort Providence, Fort Resolution, Wrigley, Tuktoyaktuk, Colville Lake, Sachs Harbour, Gameti, Wekweeti and Paulatuk.

Remote monitoring systems have potential to strengthen the multi-barrier approach, reduce human health risks, facilitate more cost effective technical support to community operators, and address short-term gaps in operator certification.

The second pilot program is to carry out site specific pilot study to evaluate the effectiveness of using innovative water treatment technologies that are appropriate to treat water in small northern communities to meet current Guidelines for Canadian Drinking Water Quality (GCDWQ).

This program started in 2009/10 and will continue to 2011/12. During 2011/12, PWS will:

- Plan and install remote monitoring systems in Gameti, Wekweti and Paulatuk.
- Continue to conduct pilot studies to search for appropriate water treatment technologies to treat water in small northern communities will continue for future upgrades and modifications to meet Guidelines for Canadian Drinking Water Quality.
- Provide technical support to design and construct water treatment plants in Lutselk'e, Jean Marie River, Trout Lake, Fort Good Hope and Wrigley.
- Complete infrastructure review for Sachs Harbour, Ft Resolution and Tsiigehtchic water supply systems.
- Continue to provide technical support to WTP operators and provide Operator training as part of the circuit rider training program where necessary.
- Continue to provide remote monitoring system training and support to communities.
- Continue to provide technical assistance to community governments in water and sewer related projects where necessary.

Planned activities for 2012/13 include continuing to provide technical support to communities, completing infrastructure reviews, and provide training for remote monitoring systems.

Action: Mitigate and Adapt to Climate Change Impacts

Reducing GNWT Energy Use

Climate change has significant impacts for the Western Arctic, particularly in the Mackenzie Delta. Warming air and soil temperatures and increased precipitation will affect the performance of existing infrastructure. Design and maintenance of future infrastructure must take into account the conditions which may be expected during the life of the facility.

PWS and the GNWT are adapting and reacting to the climate change in a number of ways. The following ongoing activities will all continue into 2011/12 and beyond.

Mitigation activities include reduction of greenhouse gas emissions through the reduction of fossil fuel use and the use of alternative fuels and energy sources (biomass, hydroelectricity, solar and other) which do not emit greenhouse gases. Example of PWS activities to reduce greenhouse gas emissions are the installations of biomass boiler plants in individual buildings and in district heating systems, the use of electric boilers or other electric equipment using on hydro power where it is available, installation of solar water heating systems and the use of ground source heat pumps. Energy conservation and retrofitting of existing buildings and increased efficiency in new buildings are also emphasized by the GNWT and used in the mitigation of climate change.

New GNWT buildings are built to Good Building Practice for Northern Facilities and Model National Energy Code levels. Existing buildings' energy use is monitored, and energy use patterns and Thermoscan/preliminary energy assessment surveys are used to select buildings for advanced energy audits and retrofits through the Capital Asset Retrofit Fund. The GNWT also promotes public

awareness of energy use and conservation, community energy planning, participates in energy fairs, and shares information and expertise with other groups and territories.

Ongoing adaptation activities by the GNWT include the preparation of a GNWT Climate Change Impact and Adaptation Plan, and participation by staff on Canadian Standards Association, Public Infrastructure Engineering Vulnerability Committee and National Round Table on Environment and the Economy committees and working groups on climate change to study and determine best methods to design for, adapt to, and reduce the effects of climate change in the North. Additionally, the GNWT and PWS have allocated funding and are implementing projects to protect existing and future buildings from climate change effects (such as foundation deterioration and increased snow loading), the planning and construction of new infrastructure which will be suitable for anticipated future climate conditions, the implementation of alternative energy projects, and mapping of permafrost vulnerabilities. PWS has contributed to, and continues to support, research into climate change trending and temperature prediction in the Western Arctic. Ground temperature measurement and monitoring are being performed at selected new buildings in Inuvik and the Mackenzie Delta.

a) Capital Asset Retrofit Fund

The Capital Asset Retrofit Fund provides funding to upgrade existing GNWT buildings which are not energy-efficient. The program will assist in reducing building operating costs and greenhouse gas emissions in GNWT owned facilities throughout the NWT.

Each year, the Capital Asset Retrofit Program addresses several of the worst energy-consuming assets. This program supports the Government's objective to reduce energy costs and greenhouse gas emissions in the Northwest Territories.

The 2011/12 work plan will be established based on the results of the detailed energy audits and various technical assessments completed in 2010/11.

b) Wood Pellet Boiler – Fort Simpson

PWS initiated the project to install a biomass (wood pellet boiler) heating system in the Central Heating Plan in Fort Simpson in 2010/11

PWS is targeting the 2011/12 fall heating season for completion of this project.

Four Year Business Plan Update

Results to Date

O&M to Focus on Deferred Maintenance Initiative

PWS has completed facility condition inspections reports on 631 GNWT facilities. Approximately 470 million of deferred maintenance has been identified. This number will be reduced as major projects are completed and deferred maintenance is addressed through capital and operations and maintenance funding or when surplus assets are decommissioned.

Asset Management Reorganization

The Asset Management Division has reorganized to be better positioned to respond to changes in the departmental operating environment. The reorganization of Asset Management was completed in 2009/10 and there are no further structural changes anticipated in the near future.

Highlights of the reorganization include grouping the facility planning and technical services staff in a separate Design and Technical Services Division, and grouping property management, quantity surveying, maintenance advisers, risk management, and capital planning staff in a separate

Infrastructure, Operations and Accommodations' Division.

Energy Management Initiatives
For PWS, Energy Management is important during the entire life of a build, through its design, construction, operation, and renovation.

Activities planned to be completed in 2010-11 include:

- Complete energy retrofit projects in approximately 18 communities. Retrofit projects include installing solar PV systems, occupancy sensors, lighting systems, boiler controllers, generators, demand controlled ventilation systems, variable frequency motors, heat recovery system, direct digital controls including building envelope upgrades.
- Complete preliminary energy assessments on 40 GNWT and community buildings in Yellowknife and Fort Simpson and surrounding areas.
- Complete detailed energy audits on 5 buildings best suited for energy-saving retrofits and greenhouse gas emission reductions.
- Assist NTPC in the installation of residual heat recovery system utilizing waste heat from their generator plant as the base heating load for the GNWT Multi Purpose Building facility in Inuvik (both main office building and adjacent warehouse/data centre).
- Assist NTPC in the installation of residual heat recovery system utilizing waste heat from their generator plant as the base heating load for the School in Fort Liard.
- Work with the City of Yellowknife to identify suitable facilities which could be served by their proposed District Heating system utilizing geo-thermal heat pumped from underground Con Mine workings.
- Complete review of major GNWT assets for potential use of biomass heating (wood pellet boilers) systems.
- Design and tender of a biomass heating plant installation at the Central Heating plant in Fort Simpson.

Water Supply System Upgrades, Training and Support
Two pilot studies for Jean Marie River and Trout Lake to examine the ability of using innovative water treatment technologies for the removal of colour from community water supply systems were completed in 2009/10 and 2010/11, and plans to complete a pilot study for WhaTi to investigate the option of using lake water during summer months for community use in 2010/11.

PWS completed the installation of remote monitoring systems in Fort Resolution, Fort Providence and WhaTi and plans to install remote monitoring systems in Colville Lake, Sachs Harbour and Tulita in 2010/11.

Completed the commissioning of water treatment plants in Ulukhaktok and Behchoko. Also provided operator training in Fort Providence and Sachs Harbour, and conducted an infrastructure review of Tsiigehtchic water supply system.

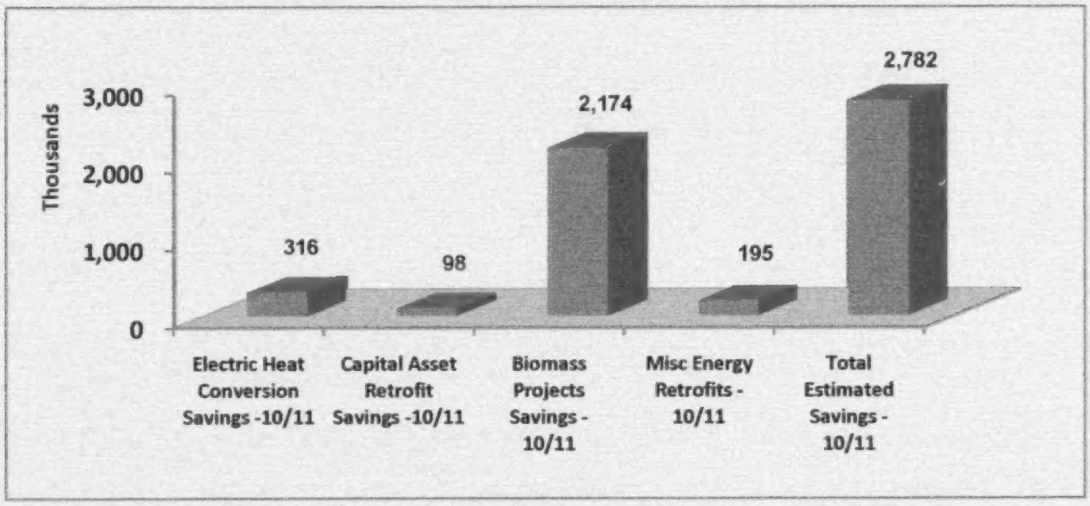
Capital Asset Retrofit Fund
The Capital Asset Retrofit Fund is established to upgrade existing GNWT buildings which are not energy-efficient.

The program is expected to reduce annual energy use by 15% in each building for savings of up to $10,000 per building (based upon a maximum of 11,000 litres of displaced fuel oil, natural gas, and/or propane). Greenhouse gas emissions will be reduced by up to 20 tonnes per building.

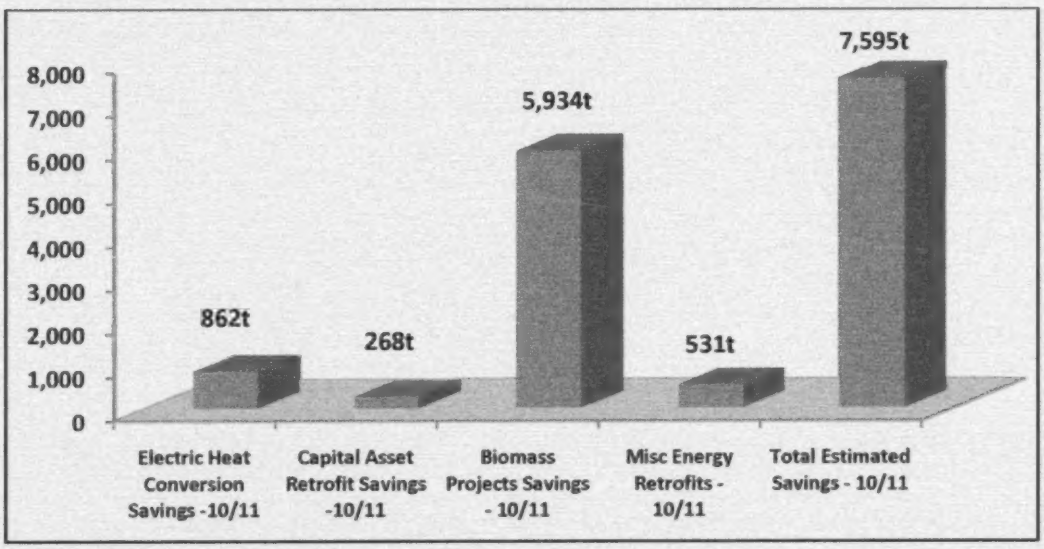
In 2010/11 more than 18 buildings are targeted for energy retrofits/upgrades projects which alone will reduce annual operating costs by $325,500 and greenhouse gas emissions by 268 tonnes. By the end of 2010/11, biomass (wood pellet) boilers and miscellaneous energy conservation projects will have displaced 2,782,051 litres of heating oil and 7,595 tonnes of greenhouse gases.

The following graphs help illustrate the projected reductions from various energy conservation projects/initiatives managed by PWS:

Estimated Heating Oil Displaced (Litres) – End of 2010/11



Estimated Reduction in Greenhouse Gas Emissions (tonnes) - End of 2010/11



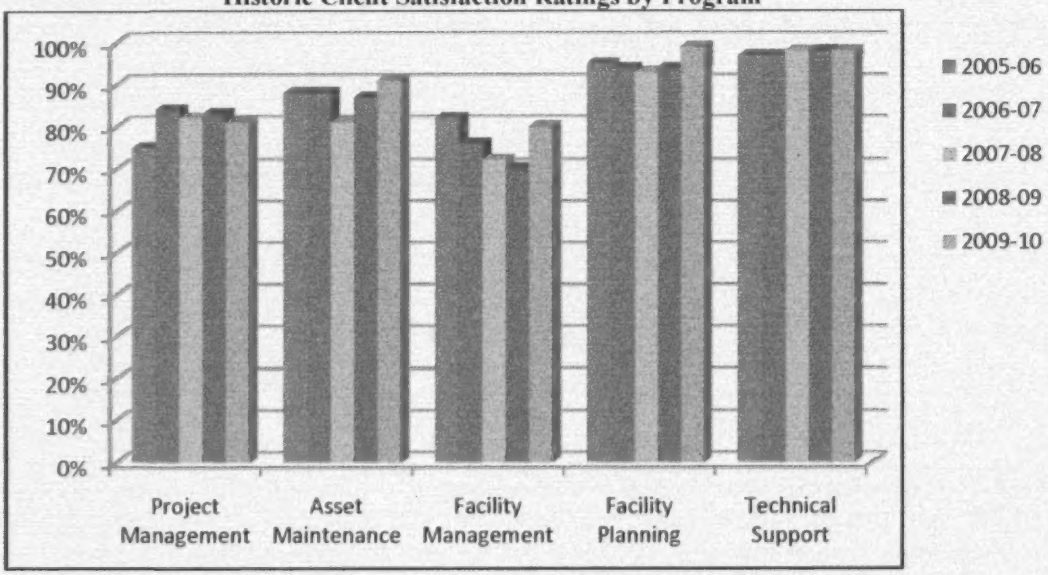
The implementation of the 2010/11energy retrofits/upgrades is proceeding in conjunction with the ongoing Deferred Maintenance Program, with both programs coordinated to ensure the realization of maximum energy savings with the best payback period.

Measures Reporting

Client Satisfaction Surveys in the areas of project management, asset maintenance, facility management, facility planning and technical support services.

Target: 80% satisfaction

Historic Client Satisfaction Ratings by Program



Deferred Maintenance:

Target: 100% of identified life safety deferred maintenance issues addresses through deferred maintenance funding

- In 2009/10, 100% of life safety deferred maintenance issues were addressed through deferred maintenance funding. There was $8.55 million of Priority 1 items that were identified at the start of the 2009-10 fiscal years. The end result was that $8,550,000 was spent on Priority 1 items which meant that 100 percent of life safety issues were addressed during 2009-10 through deferred maintenance funding.

Asset Maintenance:

Target: 100% of code mandated Preventative Maintenance work completed

- In 2009/10, there were 11,504 code mandated Preventative Maintenance work orders generated by the department. Of that total, 10,472 were completed which equates to 91%.

Property Management:

Target: 90% of accommodations meet GNWT standards and criteria

- In 2009/10, 96% of office space utilized meets the standard. The total amount of space that is managed by PWS is as follows:

- 44,550.9 square metres of leased space
- 12,601.4 square metres of owned space

KEY ACTIVITY 3: TECHNOLOGY SERVICE CENTRE

Description

The Technology Service Centre (TSC) provides Information Technology (IT) services and support to GNWT departments and the Deh Cho and Sahtu Health Authorities. The TSC is responsible for the network that interconnects over 120 departmental local area networks in government offices, schools and health care facilities in all 33 communities. The TSC maintains the government's e-mail, servers and data storage infrastructure as well as provides desktop/laptop support and application hosting.

The TSC manages the government's primary data centre in the Stuart M. Hodgson Building. The TSC is also responsible for two smaller data centres in Fort Smith and Inuvik.

All calls for TSC assistance are handled through the TSC's Service Desk. The TSC continues to focus on becoming increasingly client-focused. It is also committed to enhancing the TSC services and support through ongoing quality and process improvement.

Major Program and Service Initiatives 2011-12

Overall

Enterprise Network Strategy (ENS)
The Enterprise Network Strategy is a 5 year network plan which began in May 2008. The Strategy has evolved from a series of "quick wins" and foundational changes across the network, to delivering sophisticated network solutions to departments. In 2011-12, TSC in partnership with EC&E will complete a project which began in 2010-11 to move School Board and Aurora College Internet traffic off of the general GNWT network and onto its own Internet facilities, thus reducing congestion for all GNWT departments on the shared network. TSC and EC&E will work together to track usage and monitor costs and appropriate Internet use policies. Another major initiative will provide the ability to prioritize network traffic in the satellite communities and have multiple simultaneous video conferencing sessions, increased bandwidth and reduced satellite latency.

Other network initiatives will focus on improved network firewall security.

Disaster Recovery Planning (New GNWT Data Centre)
Early 2011-12 will see the completion of the data network installation in the new Data Centre in Yellowknife. The focus will be on tuning both the building operations equipment (mechanical, electrical) and the IT infrastructure equipment to ensure it is working at optimum capacity. TSC will continue to work to the longer term plan to increase redundancy and backup capabilities of this new primary data centre with the Stuart M. Hodgson secondary data centre.

The TSC is also overseeing the network and server equipment installation in the new Data Centre location in Inuvik which is scheduled for completion early in 2011-12.

New GNWT Network Contracts
A major TSC activity is the completion of negotiations for a new contract to provide network services for departmental strategic initiatives, GNWT e-mail and departmental systems in early 2011-12.

These new contracts will help to develop new billing models so that departments can have more visibility into network usage and cost management.

Continual Service Improvements
In 2011-12, TSC will replace its current Help Desk software and provide opportunities for other departments to benefit from new functionality and reporting capabilities about their operations. An e-mail archiving solution will be implemented which will provide remote access to all e-mail files and consolidate e-mail storage infrastructure. TSC will continue to do annual server and network infrastructure upgrades and maintenance throughout 2011-12 to ensure GNWT infrastructure remains in a current, supported state.

Strategic Initiatives

There are no strategic initiatives associated with the Technology Service Centre to report on.

Four Year Business Plan Update

Results to Date

Enterprise Network Strategy
In 2009-10 and the first half of 2010-11, the TSC continued delivery of the 5 year Enterprise Network Strategy which began in May 2008. Network prioritization was implemented in the terrestrial communities in the NT and allowed critical government and health data traffic to flow ahead of less critical business and education traffic. A key driver of this was the growing volume of video conferencing by departments. The TSC implemented the capability to carry video conferencing traffic successfully and affordably to the terrestrial communities, instead of relying on more costly, external service provider facilities.

Other 2010-11 network initiatives include improved network security controls to securely transmit digital x-ray images and healthcare results. As well, TSC implemented additional network measuring tools to support future GNWT network and Internet bandwidth purchases and cost allocation.

Disaster Recovery Planning (New GNWT Data Centre)
PWS/TSC is on target to complete the construction of the new GNWT primary Data Centre in fall of 2010. This building will become the primary GNWT data centre location and the current Stuart M. Hodgson data centre will become the secondary site. Throughout the remainder of 2010-11, the TSC will complete the technology configuration, equipment procurement and data migration. The data centre will ultimately have capacity to meet the needs of a 20 year lifespan.

Network Contract Renewal
GNWT's Digital Communications Network (DCN) is up for renewal. A Request for Proposals was issued with a target date for a new contract by March 2011.

Key objectives of the Contract are increased bandwidth, network redundancy, network prioritization and satellite transmission to deliver short and long term GNWT strategic initiatives.

Continual Service Improvements
During 2009-10 and into 2010-11, TSC has completed targeted network and server upgrades and maintenance to ensure that the GNWT infrastructure remains in a current, supported state that will ensure that all GNWT departments are able to maintain acceptable performance levels.

With input from departments, the GNWT IS/IT Standards Committee and the ISAC committee, TSC completed upgrades to various software applications and is doing the technical and cost research to implement an external SharePoint solution. This will provide improved collaboration capability on IS/IT projects and documents between departments and external contractors. TSC is also engaged in the Electronic Records Document Management System project assessment.

Measures Reporting

Measure 1 - Computing and Data Communications

Target: 80% satisfaction

The TSC carries out client satisfaction surveys in February and March. The overall client satisfaction rating of 86 percent for 2009-10 is the same result achieved in 2008-09. In total, 618 clients responded to the survey which is 25% of the TSC's full service clients.

Measure 2 - Desktop Support Services

Number of Service Desk Calls answered within 30 seconds
Target: 90% of total

- In 2009/10, 85.7% of calls were answered within 30 seconds. In total 6,379 calls were received by the TSC Help Desk.

Number of Service Desk Calls resolved without sending a TSC technician
Target: 65% of total

- In 2009/10, 68% of calls were resolved without sending a TSC technician. In total 6,379 calls were received by the TSC Help Desk.

Number of Service Desk Calls followed up for quality control
Target: 1000 calls followed up

- In 2009/10, 1,005 calls were followed up for quality control.

Prime time availability of file and printer servers
Target: 99.9% during prime time

- In 2009/10, file and printer servers had an availability in excess of 99.9 % were available during prime time.

Measure 3 – Computing and Data Communications

Number of Major Security Incidents
Target: less than 2/year

- In 2009/10 there were no major security incidents.

KEY ACTIVITY 4: PETROLEUM PRODUCTS

Description

The Petroleum Products Division (PPD) manages the purchase, transport, and storage of petroleum products for sixteen NWT communities not served by the private sector. The products are sold and distributed to businesses and residents of these communities through independent local contractors. PPD also provides fuel delivery and maintenance services to NWT Power Corporation tank farm facilities in twenty communities.

PPD financial and administrative headquarters are located in Fort Simpson, with responsibilities for credit, invoicing, collections and financial planning. PPD staff based in Fort Simpson, Inuvik and Yellowknife oversees operations in the communities and instruct and support local delivery contractors. PPD determines fuel re-supply quantities and manages fuel quality control, establishes operational procedures, capital standards, and manages fuel storage and distribution facilities maintenance and related environmental assessments.

The PWS Asset Maintenance group within PPD manages the operations, maintenance and disposal of GNWT goods and buildings, and when requested supports community governments in the management of their infrastructure responsibilities throughout the Nahendeh Region.

Major Program and Service Initiatives 2011-12

Overall

New Petroleum Products Management Information System
To reduce administrative costs and increase inventory accuracy and control, PPD will continue to refine and enhance the newly installed fuel management information system. The installation of "point-of-sale" devices for sales data collection in additional communities and liquid level monitoring devices will complement the Energy system to provide improved loss control and enhanced security of government assets and protection of the environment. A self serve web portal will be implemented to allow select customers to view their statements of account on line.

Alternative Supply and Transportation Model
To effectively reduce the cost of transportation, PPD will maximize the volume of fuel transported to the GNWT by bulk tanker via the Alaskan "over the top" route, and limit the volume of fuel transported via the traditional Mackenzie River route.

Fuel Swap Program
To manage fuel cost risk, where appropriate, the Department of Finance will initiate a Fuel Swap (hedging) program. This will allow the GNWT to obtain futures contracts to reduce exposure to fluctuations of the spot market cost of fuel. Fuel Swap contracts would be executed in accordance with FAM Policies and PPD strategy, when market conditions and future prices are determined to be favorable for such transactions.

Fuel Facilities Design, Specifications and Drawings Revision Project
The Northern Fuel Storage and Distribution Facilities Design Rationale, the Specifications, and the Detailed Drawings documents are being reviewed and revised on behalf of PPD by the Technical Support section of PWS, to incorporate the most recent code requirements and best building practices.

Fuel Delivery and Maintenance Services - Northwest Territories Power Corporation
PPD entered into a ten-year agreement (2005-2015) to provide fuel supply and maintenance services to the NTPC for twenty of their fuel storage facilities. This increase in sales volume has had a direct and positive impact on PPD operating levies charged to customers. PPD uses the bulk fuel storage capacity of GNWT and NTPC facilities to manage inventory to the advantage of both organizations and their customers.

Community Fuel Delivery Contractor Support and Training
To provide support for fuel delivery within communities, PPD will implement a comprehensive, multi-year program of training, personal licensing and bonding, safety and environmental practices in fuel dispensing and distribution, as well as best business practices of accounting, inventory and financial management and enhanced customer service.

Aviation Fuel Program
To provide optimal fuel service to the aviation industry at a reasonable cost, PPD is reviewing their aviation fuel facilities, policies, and procedures. It is intended that aviation fuel services will be provided in accordance with best industry practice and quality control, to ensure the reliable and safe storage and dispensing of fuel to aircraft that serve our remote communities.

Strategic Initiatives

There are no strategic initiatives associated with the Petroleum Products Division to report on.

Four Year Business Plan Update

Results to Date

New Petroleum Products Management Information System
The new PPD ("Energy") fuel management information system is fully operational, with the modern inventory control and accounting software, and complementary "point-of-sale" devices for electronic sales data collection now installed and operating in eight PPD communities.

Alternative Supply and Transportation Model
PPD engaged marine carrier NTCL to purchase more than eleven million litres of fuel in each of years 2008 and 2009, and transport that fuel by tanker via the Alaskan "over the top" route. By this action PPD has avoided more than five million dollars in freight costs versus use of the traditional Mackenzie River route. Four million litres of fuel purchased in the summer of 2009 were placed in vacant NTPC fuel storage tanks at Hay River. The fuel will be distributed to the communities of Sachs Harbour, Ulukhaktok, and Paulatuk, thereby mitigating the need for a risky "sealift" process in the summer of 2011, and effectively stabilizing heating fuel prices in these communities until the summer of 2011.

Fuel Swap Program
PPD has drafted procedures and strategy to support the execution of fuel swaps, and the Department of Finance is in the process of establishing a Master Agreement with a financial institution to facilitate the program. It is expected that the capability to execute fuel swap contracts will be fully established in 2010/11.

Fuel Facilities Design, Specifications and Drawings Revision Project
The project to review and amend the Northern Fuel Storage and Distribution Facilities Design Rationale, Specifications, and Detailed Drawings documents is now at 90% completion and

scheduled to be published in 2011.

Fuel Delivery and Maintenance Services – Northwest Territories Power Corporation
The agreement to provide fuel supply and maintenance services to NTPC allowed PPD to reduce the operating levy charged to customers from 12 cents per litre to 8 cents per litre. Lower fuel supply and transportation costs allowed significant reductions in fuel costs to NTPC in 2009 and 2010. As these fuel storage tanks age, emphasis on NTPC infrastructure renewal to ensure the cost-effective purchase, for PPD in 2009. The establishment of this fuel in 2010 will benefit NTPC and GNWT customers by enabling the purchase of heating fuel in quantities required to meet the needs of all communities.

PPD consults with NTPC regarding major repairs and renovations to NTPC fuel facilities in Inuvik, Tuktoyaktuk and Yellowknife. NTPC is considering the establishment of a long-term lease with PPD for the Nahuli Bulk Fuel Facility in Tuktoyaktuk, which would allow PPD to pursue business opportunities and mitigate fuel cost and supply risk to the GNWT and NTPC. The Nahuli Fuel Facility requires additional renovations to maximize capacity, although a decision regarding further investment is on hold pending the establishment of a lease.

Environmental Remediation
The Environmental Site Assessment (ESA) performed in the summer of 2009 at the Lutsel K'e old GNWT tank farm property indicates remediation at this location is not required. Six ESA's were completed at various communities in 2009 and three more are to be completed in 2010. Remediation work has started at contaminated sites in Sachs Harbour, Tulita and Deline. PPD will continue to identify areas of contamination and initiate and manage ESA projects, while the environmental remediation activities will be carried out by PWS Project Management staff.

Community Fuel Delivery Contractor Support and Training
A comprehensive PPD contractor fuel operations manual is nearing completion. This manual will be used as a training tool and reference for community contractors. The PPD health, safety and environmental (HSE) training program is now designed and will commence at marine resupply communities in the summer and fall of 2010, and will resume in conjunction with winter resupply 2011.

Spill Response Training Exercises
As an associate member of Mackenzie Delta Spill Response Corp. (MDSRC), PPD now has emergency access to their large spill response equipment inventory at Inuvik. PPD operational staff will participate in recurring practical spill response training which started in March and is scheduled again for September of 2010. It is intended that relevant spill response training will also be made available to PPD community contractors.

Aviation Fuel Program
Aviation fuel will now be provided in Deline from a newly constructed aviation storage and dispensing facilities. Formal memoranda of understanding have been established with DOT for fuel use in airports in Deline, Sachs Harbour, Ulukhaktok and Paulatuk. Select PPD staff has recently been accredited to train PPD community contractors in industry standard best practices for aircraft fuel handling and aviation fuel equipment operation. A comprehensive PPD airport fuel operations manual for contractors is nearing completion.

Measures Reporting:

Measure 1 – Number of incidents of fuel rationing:
Target: Zero incidents

- There were no incidents in 2009/10.

Measure 2 – Number of incidents of fuel run-outs:
Target: Zero incidents

- There were no incidents in 2009/10. When deliveries are delayed due to unusual or [illegible] volumes or customer error, a [illegible] notification is provided to local contractors [illegible] contracted directly by PPD.

Measure 3 – Administration and overhead costs as a percentage of gross expenditures
Target: Less than 15% of gross expenditures

- Administration and overhead costs were 14.5% in 2009/10. Two expenditure components, the purchase price and transport of fuel, and commissions paid to local delivery contractors have historically accounted for at least 75 percent of PPD's annual budget. Increased revenues associated with the provision of fuel services to NTPC under the Fuel Management Services Agreement have caused these expenditure components to increase to greater than 85 percent of PPD's annual budget.

Measure 4 – Number of litres of fuel spilled as a percentage of annual sales volume
Target: All spills combined total less than 0.01% of annual sales volume

- Spills in 2009/10 were less than 0.01% of annual sales volume. PPD sold 24,203,596 litres of fuel in 2009-10.

c) Infrastructure Investments

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Deferred Maintenance

PWS has continued with a focus on deferred maintenance. To date, 630 facilities have been spected and have been entered into a building condition database. The GNWT will see many benefitthrough the ongoing implementation of this program, including safer buildings, a reduction in the mber of unplanned building closures, a reduction in the use of substandard facilities, a reduction in nplanned expenditures and the deferral of major capital expenditures.

Capital Asset Retrofit Program

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Planning Studies

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Planning studies scheduled for completion in 2010/11 are:

- Hay River - H.H.Williams Memorial Hospital
- Fort Simpson - Regional Laboratory

- Inuvik - Replace Shell Lake ENR Complex
- Hay River Reserve - New Natsejee Ke A&D Treatment Centre
- Fort Smith - TWCC - Planning Study – 50 bed New Facility
- Inuvik - PWS Shop Replacement
- Tulita - Tank Farm – Code Upgrade/Increase Capacity

GNWT Multi-use Facility and Records Storage Facility (Inuvik)
The FMB approved inclusion of a design-build-own capital project for a 3,575 m^2 multi-use facility and a 793 m^2 records storage facility to be constructed on the old Aurora College site in Inuvik. Construction will be substantially completed in FY 2010/11.

PWS and NTPC will work together to incorporate a waste heat recovery system to supply waste heat to the multi-use facility from the NTPC power generation plant.

New Computer Data Centre (Yellowknife)
In 2008/09, PWS issued a design-build RFP and awarded a contract for the design and construction of a new 1,250 m^2 Data Center. One of the features of the new Data Centre is that waste heat from the IT equipment will ultimately supply the heat required by the building.

As of August 2010, construction of the building and mechanical equipment is almost complete. In the early fall, TSC will start to install the IT network, server and storage equipment and connectivity.

Tank Farm - Code Upgrades/Replace Dispensers (Wrigley)
The Wrigley Fuel Storage Facility was originally scheduled for decommissioning four years ago, but remediation efforts took longer than anticipated. After the private fuel delivery contractor shut down their facility in 2007 the community was left without any fuel services. As a result, PPD was contacted for assistance and were able to re-activate their fuel storage facility on short notice but the facility does not meet National Fire Code (NFC) and needs to be upgraded.

The existing resupply lines and shore manifold need to be removed and the dispenser cabinets need to be replaced along with the applicable Code upgrades to be completed.

Planned Activities – 2011-12

Deferred Maintenance
PWS will continue with a focus on deferred maintenance to ensure safer buildings, a reduction in the number of unplanned building closures, a reduction in the use of substandard facilities, a reduction in unplanned expenditures and the deferral of major capital expenditures.

Proposed 6,000m2 General Purpose Office Building (Yellowknife)
In July 2009, an interdepartmental working group led by the Program Review Office in the Department of the Executive, produced a comprehensive report on the GNWT's General Purpose Office Space Program (GPOS). The report concluded that considerable long term savings could be realized by acquiring a new +/- 6,000 square meters of GNWT-owned space to meet current office space needs in the City. The savings from owning and operating a new building are considerable, and would begin to accrue almost immediately. The additional 6,000 square meters of new GNWT-owned space could be added to address lease expiries over the next three years. Adding this much space is expected to have a positive impact on the market and economy.

The long term savings to the GNWT over the 40 year life of a new building are estimated to be $100 million and approximately $145 million if the residual value of the building is included.

Stuart M. Hodgson Building (Yellowknife)

HVAC Upgrade
The performance of the Ventilation and Air Conditioning system continues to be poor resulting in the building overheating throughout the summer months. In order to provide a basic level of cooling the building is run 24 hours per day during the cooling months and results in high energy consumption during unoccupied periods. The design is complete and the work is scheduled to be phased in over two years. The mechanical equipment is scheduled to be replaced in 2010/11 under Deferred Maintenance while the controls equipment is to be replaced in 2011/12 using small capital funding. The small capital funding is required for Phase 2 of the project.

Tenant Improvements
In April, 2011, 381 square meters of space on the 2nd floor will be vacated by the TSC when they are relocated to the new Data Centre. The space will provide additional general purpose office space for GNWT Departments.

The GNWT has an overall need for office space in Yellowknife to meet ongoing and strategic initiatives. The development of the 2nd floor will accommodate for future GNWT office requirements in accordance with Yellowknife Office Plan. Funding is for the design and construction of the required tenant improvements.

Fuel Delivery Vehicles (Colville Lake)
The existing fuel delivery vehicle is now ten years old and through normal wear and tear it now requires replacement due to its deteriorated condition. Reliability is an increasing concern: the truck is a light duty two-wheel drive vehicle, and its design has proved to be less than practical for this environment where roads are unimproved and extremely cold temperatures are common. Fuel trucks are normally replaced on a ten year cycle, so the age and condition of this truck necessitates its replacement.

Maintenance Shop – Replacement (Tuktoyaktuk)
The PWS workshop in Tuktoyaktuk was built in 1960 and no major retrofits have been completed on this building. The location of the building subjects it to extreme environmental conditions and the structure has reached the end of its serviceable life. It is used on an occasional basis for storage only.

In May 2008, an analysis of the facility indicated that the cost of repairs required to bring the facility to a reasonable level would be in excess of $500,000. Based on this information, replacement of the building is a more appropriate expenditure of government funds.

Capital Asset Retrofit Program
Using the data gained through energy audits and mechanical/electrical system analysis of GNWT buildings and information collected by other on-site or background research, the best buildings for reinvestment (via renovation or retrofit) will be selected. Each year, this overall energy retrofit plan will be re-used to address several of the worst energy-consuming assets. This program supports the Government's objective to reduce energy costs and greenhouse gas emissions in the Northwest Territories.

Planning Studies
The infrastructure planning and acquisition process includes a Planning Study phase to take place prior to a major project being considered for inclusion in the Infrastructure Acquisition Plan. A Planning Study will include a clearly defined needs analysis, an operational plan, a functional

program, technical and functional evaluations of existing facilities, site analysis, an examination/evaluation of development options, development of a Schematic design for the preferred development option and project schedule.

There are five planning studies proposed for 2011/12. For a detailed list of the proposed planning studies, refer to the GNWT's 2011/12 Infrastructure Acquisition Plan.

TSC Infrastructure – Evergreening
This project supports critical infrastructure acquisitions, based upon evergreening requirements (20% of equipment over five year life span) and growth driven by departmental initiatives. These are needed to maintain and enhance the core IT infrastructure.

d) Legislative Initiatives

Activity to Date

There are no legislative activities underway in Public Works and Services.

Planned Activities – 2011-12

There are no planned legislative activities for 2011-12.

e) Human Resources

Overall Human Resource Statistics

All Employees

	2010	%	2009	%	2008	%	2007	%
Total	**246**	**100**	**240**	**100**	**249**	**100**	**237**	**100**
Indigenous Employees	130	53	112	47	114	46	109	46
Aboriginal	89	36	79	33	77	31	74	31
Non-Aboriginal	41	17	33	14	37	15	35	15
Non-Indigenous Employees	116	47	128	53	135	54	128	54

Note: Information as of March 31 each year.

Senior Management Employees

	2010	%	2009	%	2008	%	2007	%
Total	**10**	**100**	**8**	**100**	**10**	**100**	**11**	**100**
Indigenous Employees	4	40	3	38	5	50	5	45
Aboriginal	2	20	0	0	2	20	1	9
Non-Aboriginal	2	20	3	38	3	30	4	36
Non-Indigenous Employees	6	60	5	62	5	50	6	55
Male	9	90	7	87	10	100	10	91
Female	1	10	1	13	0	0	1	9

Note: Information as of March 31 each year.

Non-Traditional Occupations

	2010	%	2009	%	2008	%	2007	%
Total	**124**	**100**	**119**	**100**	**116**	**100**	**107**	**100**
Female	14	11	14	12	11	10	11	10
Male	110	89	105	88	105	90	96	90

Note: Information as of March 31 each year.

Employees with Disabilities

	2010	%	2009	%	2008	%	2007	%
Total	**246**	**100**	**240**	**100**	**249**	**100**	**237**	**100**
Employees with disabilities	4	2	4	2	4	2	5	2
Other	242	98	236	98	245	98	232	98

Note: Information as of March 31 each year.

Position Reconciliation

This information differs from the employee information on the preceding page; human resource information reflects actual employees as of March 31 each year. The information presented below reflects position expenditures approved through the budget process for each fiscal year.

Active Positions

Summary:

	2010-11 Main Estimates	Change	2011-12 Business Plan
Total Appropriated	202	0	202
Total	**202**	**0**	**202**
Total Chargeback (TSC)	56	0	56
Total Revolving Fund (PPD)	14	0	14
Indeterminate full-time	**272**	**0**	**272**
Indeterminate part-time	0	0	0
Seasonal	0	0	0

Adjustments During the Year:

Position	Community	Region	Added/ Deleted	Explanation
Project Officer (FT)	Yellowknife	North Slave	Deleted	Sunset on NWT Law Courts
Project Assistant (PT)	Yellowknife	North Slave	Deleted	Sunset on NWT Law Courts
Project Officer (FT)	Yellowknife	North Slave	Added	Approved through Forced Growth
Security Manager (FT)	Yellowknife	HQ	Added	Approved through Forced Growth
Security Analyst (PT)	Yellowknife	HQ	Deleted	Funded from PT to FT through forced growth
Security Analyst (FT)	Yellowknife	HQ	Added	Funded from PT to FT through forced growth

Other Positions

Summary:

	2010-11 Main Estimates	Change	2011-12 Business Plan
Total	-	-	-
Indeterminate full-time	-	-	-
Indeterminate part-time	-	-	-
Seasonal	-	-	-

Adjustments During the Year:

Position	Community	Region	Added/ Deleted	Explanation
There have been no changes to PWS positions				

Other Human Resource Information

One of the stated priorities of the Legislative Assembly is to "improve human resource management within the GNWT through training, career planning, and encouraging innovation by employees." To address this priority, the Department of Human Resources has launched a long-term human resources strategy for the public service entitled, *20/20: A Brilliant North*. Among other initiatives, this strategy provides a framework for the development of departmental human resource plans, including succession plans and affirmative action plans.

The tables below indicate statistics on departmental human resource activities with respect to summer students, interns and transfer assignments for 2010. The information is current as of July 2010.

Summer Students				
Total Students	Indigenous Employees (Aboriginal + Non Aboriginal	Indigenous Aboriginal	Indigenous Non-Aboriginal	Non-Indigenous
15	14	9	5	1

Interns				
Total Interns	Indigenous Employees (Aboriginal + Non Aboriginal	Indigenous Aboriginal	Indigenous Non-Aboriginal	Non-Indigenous
0	0	0	0	0

Transfer Assignments				
Total Transfer Assignments	Indigenous Employees (Aboriginal + Non Aboriginal	Indigenous Aboriginal	Indigenous Non-Aboriginal	Non-Indigenous
28	18	7	11	10

The following are department employee demographics and HR metrics at March 31, 2010

Employee Demographics	
Average Age	46.8
Average Years of Service	10.5
Percentage Employees 18-29 years old	6.9%
Percentage Employees 30-39 years old	21.1%
Percentage Employees 40-49 years old	26.0%
Percentage Employees 50 years old and over	45.9%
Percentage Employees eligible to retire within 5 years	31.3%
Percentage Employees eligible to retire within 10 years	37.0%
Percentage Senior Management eligible to retire within 5 years	50.0%
Percentage Senior Management eligible to retire within 10 years	70.0%

Activities Associated with Staff Training & Development

The Department actively supports on-going professional development of staff. This includes support for participation in professional conferences, courses, training workshops and college courses.

The department continues to experience difficulty recruiting affirmative action candidates for its professional and technical positions due to the level of education required for these positions. Intern positions are established in hopes of developing resources in its technical positions but with limited success. There have not been enough students graduating with a post-secondary education in these disciplines to fill the Intern positions. The department is a co-sponsor of the math and science award program for middle and high schools throughout the NWT as means of encouraging students in these subject areas as they are a requirement for engineering and architecture post-secondary programs.

Northern Trades Apprenticeship Program
The shortage of skilled trades people in the NWT and in other areas of Canada continues to be a problem, and remains a factor in rising construction costs and delays in project delivery. Departments and NWT community governments have always experienced difficulty staffing trades positions, especially in the smaller communities.

In 2007-08, PWS was approved for eight apprentice positions. These included carpenters in Fort Simpson, Fort Smith and Norman Wells; an electrician in Inuvik; plumber/gas fitters in Fort Simpson, Hay River and Inuvik; and a stationary engineer in Hay River. In 2009-10, the department added a new apprentice electrician in Fort Smith, and an apprentice electrician in Hay River. In 2010/11, the department established a new apprentice plumber position in Fort Smith which brings the total number of apprentice positions in PWS to eleven.

Early in the program the department had limited success in retaining employees in these positions as a number of the apprentices left the program to accept positions in the local private sector. Of the eleven apprentice positions, nine are presently filled with the incumbents being in various stages of completing their requirements (academic and working hours) towards apprenticeship certification.

Over the past four years the GNWT's Apprenticeship program has proven to be an effective method of helping to develop a stronger and more skilled northern workforce and is serving to mitigate the cost impact experienced with the continuing shortage of tradespersons.

Developmental Opportunities
PWS has twenty-eight employees participating in transfer assignments to develop skills and experience in other areas. Of these, seven are indigenous aboriginal employees and eleven are indigenous non-aboriginal employees. One of the assignments is an internal developmental opportunity for an existing manager (indigenous aboriginal) to the senior management position of Superintendent, North Slave Region.

GNWT Manager and Leadership Programs
Between 2004/05 and 2009/10, PWS had ten employees participating in the Emerging and Middle Manager programs and from that group seven successfully completed their programs, while three employees withdrew from the programs prior to completion. For 2010/11, the department has one employee enrolled in the spring session of the Emerging Managers program and one employee approved for participation in the Executive Leadership program in the fall.

f) Information Systems and Management

Overview

The department's approach to Information Systems/Information Management (IS/IM) is moderate, based on a mix of application technology deployed. Growth continues in the development and use of web-based and other network friendly technologies that support mandated programs and services, and those IS resources available to government in support of services provided by the department. The last corporate application running on the HP3000 platform (PPPROD) was decommissioned early in the 2010/11 fiscal year.

Public Works and Services maintain the following major information systems:

Computerized Maintenance Management System (CMMS)
The application used to administer the preventative and on-demand maintenance activities managed by PWS on government owned buildings, works, vehicles and equipment.

AMANDA
The application is used to administer permit applications and inspections for all electrical, elevator, boiler and pressure vessel, and gas installations in the NWT. It is also used to administer all new design registrations (boilers and pressure vessels) submitted by manufacturers wanting their products registered for use in the NWT. Administration of all workers certified (registration and renewal) to work in the NWT is another component of the system.

iRIMS
Records management software used government-wide to manage the information life-cycle and manage storage within the four GNWT Records Centres.

ENERGY
The application was implemented in 2008-09 to replace the outdated PPPROD system, and is used by the Petroleum Products Division (PPD) to capture and administer the information related to the sale of fuel products, contractor payments, fuel inventories and financial reporting purposes.

To reduce operational and administrative costs and increase inventory accuracy and control, PPD will complete the installation of a modern management information system. In 2009/10, this included installation and implementation of fuel inventory control and accounting software, "Point of Sale" devices and "Card-Lock" self-serve dispensing equipment, as well as electronic inventory monitoring and metering equipment.

VFA Facility
This is an application used to manage information about the condition of facilities and building systems maintained by the department. It is a centralized application first used in conjunction with the Wood Pile Remediation Program to collect data used in generating Building Condition Assessment reports, and it continues to be used with the Deferred Maintenance Program.

It supports the collection and management of a wide range of asset information, such as location, structure, type, uses, conditions, requirements and their associated costs, and related projects and plans. It integrates cost data from RSMeans and lifecycle data from Building Owners and Managers Association (BOMA) to ensure reliable cost projections for deferred maintenance and systems renewal.

Planned Activities - 2011-12

Document Management (DM)
The document management solution being implemented in PWS is an older system that is being phased out by its vendor in favour of a moderniozed solution, so it is unlikely to be the solution selected as the GNWT standard. However, the data stored in iRIMS and Hummingbird DM will be available for migration to the new system, and all of the internal business processes established and lessons learned from its use in the department will be transferrable to the new solution. Until the GNWT solution is selected it is hard to predict the impact this may have on the department's IS Section.

Modification of Existing Applications
PWS has a number of smaller applications. The future of these applications is hinged on the functionality, capabilities, etc., of the new financial information system. Examples of applications that could require modification or become obsolete are the Contract Information System and the Contracting & Procurement System.

The AMANDA application has the capability to interface with newer Financial Information Systems having a standardized general ledger (G/L) component. This opportunity has never been explored but with implementation of SAM there may be an opportunity to interface and implement on-line transactional processing (permit applications, registrations, etc). This option will be explored after implementation of SAM.

4. FUTURE STRATEGIC DIRECTION

Effective and Efficient Management of Government Infrastructure

Initiatives undertaken by the department in recent years combined with those underway in 2010-11 has defined the direction of the department. The deferred maintenance program will ensure the building infrastructure required to deliver government programs remain safe and reliable, and changes in the capital planning process are placing more rigors around the selection process to ensure the greatest benefit to the public and the best value to government is achieved. Energy Management initiatives like the Capital Asset Retrofit Fund will be used to improve the energy efficiency of government infrastructure and will be coordinated with the Deferred Maintenance and Capital Planning process to maximize the effectiveness of available funding.

The consolidation of Maintenance and Utilities will bring the remaining building infrastructure under the management of PWS and presents an opportunity to improve the overall efficiency and cost effectiveness of facility maintenance services and operations. This initiative also supports the code mandated preventative maintenance requirement that dictates all government owned buildings are operated and maintained in a safe condition, consistent to standards and in accordance with NWT acts, codes and regulations.

The GNWT faces significant challenges for the foreseeable future in the replacement of its ageing infrastructure through the funding available to support the Infrastructure Acquisition Plan. As the asset base ages at a rate that exceeds the GNWT's ability to replace or retrofit the infrastructure PWS anticipates increased demand to respond to critical needs through the deferred maintenance program.

Although energy costs retracted during the recession throughout Canada it is anticipated that these will begin to escalate again as the North American economy improves and demands for energy increase. The GNWT's investment in energy management through programs such as the Capital Asset Retrofit Fund will help offset these rising costs through lower consumption and reduce greenhouse gas emissions. PWS anticipates the demand for investment in energy management to rise as the cost of energy increases. PWS proposes to respond to the rising demand for investment in energy management in GNWT buildings by reinvesting realized energy savings produced under the Capital Asset Retrofit Program and various other energy conservation initiatives/projects. The goal is to move the Capital Asset Retrofit Fund Program toward self sufficiency in the future.

PWS maintains and promotes the GNWT's guideline for good building practices in the NWT which keeps up to date with best practices in developing efficient sustainable and energy efficient infrastructure to support GNWT programs and services with a focus on lowest life cycle costs over the life of the assets. With the anticipated rise in energy costs and the growing concerns with regard to climate change the national building codes and standards are in the process of being redeveloped to meet these challenges especially as they apply to Canada's North. It is essential that the GNWT continue to invest in its guidelines for good building practices and contribute at a national level in the development of codes and standards that affect the capital and ongoing O&M cost of our infrastructure.

PWS provides regulatory authority for boilers, pressure vessels, electrical and elevators across the NWT. Safety regulation is based on national codes and standards which are continuously under review and updating. PWS keeps up to date on new and emerging issues in boiler, pressure vessel, elevator and electrical safety through regular specialized training and participation at a national level

in the development of new codes and standards. The demand for safety regulation services is also directly affected by the volume of infrastructure across the NWT both public and private. The cost of providing these services is offset by permitting. PWS needs to ensure the Electrical/Mechanical Safety Services continue to be resourced to respond to the growth in the infrastructure base across the NWT. Attracting qualified staff in safety regulation creates significant challenges across Canada and even more so in the North.

Longer term, PWS will utilize the new System for Accountability and Management (SAM) along with the department's Computerized Maintenance Management System (CMMS) to improve the tracking of expenditures and provide better management information. Both systems will provide feedback into the effectiveness of facility maintenance and operations, and ensure code mandated activities are accounted for; aging assets are properly acknowledged and queued in the capital planning process and realized energy savings are captured and redirected into future energy management initiatives.

PWS is a client service organization designed to support government operations. The change drivers impacting the department in future will result from new and evolving program requirements identified by clients and the demand for enhanced services. Current department initiatives (Deferred Maintenance and Capital Planning) will influence some client activities but ultimately the department must respond to new program and service delivery requirements.

PWS relies upon both contracted and owned forces to delivery preventative programs to support the infrastructure that is essential for the delivery of GNWT programs and services in the communities across the north. Qualified skilled trades persons continue to be in short supply and this is not expected to change as the economy in North America improves. PWS in conjunction with the other infrastructure departments will continue to focus on supplementing the pool of skilled trades available in the north through the establishment of apprenticeship opportunities in various regions as a strategic initiative of the GNWT.

Devolution would create a substantial demand for services and draw on existing resources should it proceed at some future date. While there continues to be uncertainty around devolution the department recognizes where organizational impacts would be significant in anticipation of a future decision.

PWS Trades shops

A review of the PWS trades shops confirmed the last new trade shop was constructed in 1977. Many of the shops occupied by PWS are old buildings dating back to the 1960's that were transferred from other governments or agencies and were adapted for use as trades facilities. To rectify this situation, PWS in 2010/11 developed design standards and criteria for its trades shops. Over the next number of years, the department will be upgrading and/or replacing trades shops in several communities. These new purpose built facilities will increase efficiency, safety and staff morale. Reliable and efficient trades shops are essential to the effective delivery of preventative and deferred maintenance initiatives.

Community Fuel Resupply

Over the past several years fuel prices have continually fluctuated leaving little stability in managing community fuel pricing and resupply costs. Reducing transportation costs is one area the department has focused on to help mitigate the impact of rising fuel costs on communities. To that end, the department will continue to explore opportunities to reduce transportation costs through strategic partnerships and alternative delivery methods.